

## Education Issues

### Involving the motoring public, trucking companies and drivers and law enforcement officers.

- Better education of the public is a must.
  - This includes putting a solid structure back into driver education within the schools. To simply pass out a NC drivers license or CDL because a fee has been paid is not acceptable. This must include absolute proof of certification within the truck driving schools in NC. Are they indeed worthy to hold a license?
  - In addition, more media attention (Radio, TV, Billboards) is required as a method of notification to the general public with emphasis on obeying the traffic laws and why.
  - As we all should know by now the “Root Causes” for any accident in any venue are simply that they 1) DID NOT KNOW 2) DID NOT CARE or 3) DID NOT TRY. A failure in any of these areas yields pure and certain liability to those parties found to be at fault. This is soon followed by punitive damages for negligence.
- Safety is an “ATTITUDE”. A drivers perception of the issue is the key to success. It’s not about money .. it’s about people. Your family, my family and their family. Driving protectively/defensively is “the right thing to do”. This must be a “buy in” approach. This can not be forced upon any party. If you push. ..the other person usually pushes back.
- Tie GHSP grant funds for training/equipment to police and sheriff’s departments for CMV Enforcement, in addition to the already established safety initiatives. Training these officers would help with the lack of manpower within SHP.
- Educate beginning drivers within our school systems by teaching them how to drive safely around CMV’s. Develop a section within the high school driver’s education curriculum that specifically covers this subject. Reaching the beginning driver at any early age will diminish both anxiety and potential risk for operator error when driving around CMV’s.
- Revisit our drivers education program and strengthen the parts that deal with Commercial Motor Vehicles. Problem: There is little or no training for new drivers concerning the driving behavior around large trucks; especially those exiting on and off ramps where trucks may be approaching on the right side of the vehicle and the blind spots around the CMV better known as NO ZONE area.
- Conduct Safety Presentations at carrier sites throughout North Carolina to establish an improved working relation with the industry. Develop partnerships with Safety Representatives from the various carriers.
- Other drivers around large trucks
- Drivers pushing their physical limits due to fatigue
- Training DVD for city police and county sheriffs dept. for easy recognition of CDL violations.
- Develop and implement Inter-Agency Conflict Resolution for Motor Carrier Enforcement Operations: *Who’s responsible and what strategies can we develop to drive home the message that Motor Carrier enforcement is everyone’s responsibility? Providing CMV awareness training (Officer level) and education (Town Hall Meetings with citizenry and industry) may offer an excellent start.*
- Improve Security Through Safety Initiatives: Develop and implement safety initiatives that also have security benefits for truck and motorcoach operations.
- Work zone alertness.

- Driver experience
- Driver education
- Perception: North Carolina is still known as an “Easy Truck State.” This perception gives North Carolina a “bad image” when it comes to providing a safe operating environment for all motorists. The thin layer of SHP enforcement is certainly inadequate for the 100,000+ miles of public roads throughout 100 counties in North Carolina.
- Special enforcement, blitz statewide media with public service announcements, etc.

### **Enforcement and Inspection**

- Institute extreme enforcement for moving violations of CMV drivers. Establish serious civil penalties for speeding, such as \$100 per mile per hour over posted speed limit (such as Missouri). Money is the way to get violators attention. This will deter in-state and especially out-of-state carriers from speeding in NC. Make convictions stick—no more PJC’s or judges allowing safe/defensive driver courses to absolve violations from being convicted and not showing up on driver’s motor vehicle record.
- Build “super scales” with pits/sheds adequate enough to perform thorough inspections of CMV’s.
- Increase exposure of enforcement. Have weigh stations open at night and weekends. In-state and especially out-of-state drivers know their window of opportunity to travel through NC basically risk-free of being stopped at scales is between 5pm and 8am during the week and anytime on the weekends.
- Remedy the perception (and basis for) prevailing perceptions of Zero Enforcement/Inspection (the stations are always closed, they never stop trucks), Zero Adjudication (it won't hold up, it'll be dismissed, they're already running STAA's here so why bother), and Zero tolerance for Officers who aggressively attempt to enforce weight, size, and route regulations, statutes, and rules (he was transferred to Ahoskie, we called his supervising officer and they told him to back down, he stopped the wrong guy's trucks this time, the judge threw out all his tickets and instructed the officer not to waste his time again).
- Better enable, train, equip, and (statutorily) empower Local Police, Sheriffs, and Other Safety Partners to perform face to face Driver (logs, CMV license, medical card) Checks and make it a priority to do so.
- Substance Abuse is still rampant - and that primarily concerns substances other than POT and Alcohol. ICE is the new speed/CRANK of choice and it is readily available to those who are seeking and those who utilize it.
- Create a state sponsored Safety Inspection Program. Problem: Presently, a driver or company can conduct their own inspections on any vehicle they own.
- Look at new enforcement tools that can assist all law enforcement officers to enforce CMV's violations. Problem: The current radars used by most law enforcement agencies do not provide the officer with accurate clocks involving heavy traffic around trucks. Laser radar would assist officers in obtaining accurate and reliable clocks.

- NCDOT to create pull off ramps for weighing vehicles and inspecting trucks on our US highway system and secondary roads where truck traffic is heavy. Problem: There are no pull off ramps in NC for officers to conduct this type of activity.
- Task NCDOT to build truck pits at weigh stations. Problem: Currently, there are no pits at the weigh stations and this would speed up the level one inspection time and allow a more thorough inspection as well as safer inspection. This could be built at the new port of entry weigh stations or at existing weigh stations.
- Schedule an enforcement blitz targeting aggressive commercial motor carriers followed-up with a press conference detailing the results. The media campaign should identify monetary losses due to CMV Collisions including, court cost, liability cost, insurance, hospitalization, and lost wages.
- Overloaded/Oversized large trucks
- Trucks meeting safety inspection guidelines  
(Ex. Improperly operating brakes, tires without good tread or recaps that beginning to separate from casing.)
- Mud-flap Law for trailing axle of all units.
- Regular monthly Drivers license and health card check at all scales (48 - 72 hours straight).
- Fund and implement the Weigh Station Feasibility Study Plan.
- Overloaded trucks on non-Interstate routes.
- Excessive Speeding Trucks: From my personal experience, excessive speeding and tailgating of trucks is the number one problem. I put over 25,000 on just one of my vehicles last year with most of the mileage being on Interstate and US numbered routes. Large speeding trucks intimidate other road users. Also, there is a general feeling that trucks set the prevailing speeds. The "Consequence of Error" coupled with momentum issues (mass, stopping distance, closing distance, perception/reaction of entering traffic) of an 80,000 pound missile traveling at 75 mph or more is devastating to other vehicles. And by far, the death and severe injuries accrue to the other vehicle occupants.
- Unsafe Trucks (Equipment Issues) Overweight trucks are unsafe because extra weight stresses both power units and trailer units. All components are stressed causing marginal operating conditions and premature system failure. An 80,000-pound vehicle barreling down the road is already an unstable vehicle. And virtually any marginal factor whether vehicle, driver or roadway condition, or feature further exacerbates this condition. These conditions are amplified for vehicles enjoying the many exemptions provided in North Carolina.
- Perception: North Carolina is still known as an "Easy Truck State." This perception gives North Carolina a "bad image" when it comes to providing a safe operating environment for all motorists. The thin layer of SHP enforcement is certainly inadequate for the 100,000+ miles of public roads throughout 100 counties in North Carolina.
- At all weigh stations randomly stop and ask to see CDL and health card and observe driver actions. Have other offices cursory check the vehicle. The storage lane should be full of trucks in order to send the message that North Carolina is stopping everybody. (More face to face interaction with drivers – increase in Level III Activities).

- At the same time, further up the road from the weight stations, enforce tight speed limits on all vehicles. In urbanized areas use available local police resources. Utilize intermittent drone radar, and pursue designations of Safety Corridors with increased penalties (limited judicial flexibility plead downs) for these life saving corridor efforts.
- Continue to provide customary, assuming they are not non-existent, levels of enforcement on known weigh-station bypass routes during this time, and then switch to high profile wolf pack safety (weight, equipment, driver, and speed) enforcement on these routes. Non-Interstate routes are where we are having the worst truck problems so ultimately this is where available resources will need to be directed.
- Special enforcement, blitz statewide media with public service announcements, etc.

### **Engineering, Infrastructure and Data**

- Build “super scales” with pits/sheds adequate enough to perform thorough inspections of CMV’s.
- Increase CMV-only lanes on interstates/high crash corridors if these are problem areas. Atlanta expanded their lanes from 2 to 3, and in some areas 4 due to the number of crashes occurring in those areas.
- Accurate Crash Data, regarding CMV’s.
- Segregate non – CDL data from otherwise considered CMV Crash Data Information. As known and discussed among transportation personnel, not all CMV collisions involve CDL issued drivers. These collisions that involve vehicles where the GVWR does not require a CDL operator, but when they are involved in collisions, the data is recorded as a CMV involved collision. All data should be segregated for accuracy.
- Target resolutions for resolve a specific problem.
  - Classify Collision Data operators by type vehicle operated (CDL vs. Non-CDL)
  - Analyze crash specifics (contributing factors) and remedy by appropriation.
- Determinations from data Collections.
  - Determine if the majority of Crash Causations were – Behavior related or a Job Skill Deficiency.
  - Behavior related incidents will require enforcement correction and may be addressed by responsible employers.
  - Job Skill Deficiencies – Investigate and implement required Remedial Training (DDC, Hazard Perception Exercises, Job Skills Analysis Evaluations, Annual Driver Certifications, etc.)
- Produce and Maintain a True "NC Truck Network" with necessary connectivity, adequate bridge clearances (especially for all NHS), and geometric and operational capabilities. Would likely require technical corrections/amendments, technology advancements (GPS/GIS/Ordinancing) and rule revisions to reflect necessary Strategic and Freight Mobility corridors. Integrate STAA routings with IT Applications being developed for Oversize/Overweight Permits and with other Strategic Transportation Networks.

- Emphasize that the accelerated deterioration of our streets and highways was accurately forecast in the early 1980's, and that the premature wearing out of pavements, bridges, infrastructure and control devices has a negative systemic impact on all highway safety (and maintenance and operational) efforts. Accelerate Department Strategic Business Efforts (BOT has already adopted) toward maintaining system better through use of more highway funds for system maintenance and modernization and less on new projects (which continue to increase maintenance burden). (Rutted and crumbling shoulders, torn up and rutted travel lane pavements, bridge deterioration, frequent recurrent parking along freeway ramps and shoulders (even when public and private facilities are readily available) - the very routes that can ill afford to absorb excess weights are roads (non-interstate) that legislation has enabled 10% tolerances above the Federal 80,000 pound limits. Publicize the commodity exemptions, circumvention of law by farm exemptions (violate ICC, haul fertilizer, lower tag cost, lower license fees, enjoy multiple weight and regulatory exemptions) and provide performance data to the Insurance community.
- Rumblestrip and Median Barrier have had a very positive safety impact on NC's Freeways and Truck involved fatalities on freeways, to carry these life saving results over to partial and no control of access facilities we will have to more aggressively address ACCESS MANAGEMENT, IMPROVED HIGH SPEED INTERSECTION CONFIGURATIONS, SIGHT DISTANCE, STAA Criteria and route designations and reasonable access, improve design GEOMETRICS for contemporary Large Truck configurations and loadings.
- Increase truck parking along our interstate corridors. Problem: Trucks are parking on entrance and exit ramps causing blind spots to motorist that exit on the interstate. This has resulted in serious crashes and delays on the interstate.
- NCDOT to create pull off ramps for weighing vehicles and inspecting trucks on our US highway system and secondary roads where truck traffic is heavy. Problem: There are no pull off ramps in NC for officers to conduct this type of activity.
- Task NCDOT to build truck pits at weigh stations. Problem: Currently, there are no pits at the weigh stations and this would speed up the level one inspection time and allow a more thorough inspection as well as safer inspection. This could be built at the new port of entry weigh stations or at existing weigh stations.
- Review STAA routes for safer access to primary routes.
- Designation of truck routes around and away from business routes.
- Collision reporting and the timely and accurate delivery of the information provided in the collision report are essential towards charting and benchmarking progress.
- Overweight and Off Route Trucks: From an engineering and safety standpoint, overweight trucks operating on NC highways is the number one problem. Damage to roadways increases with the 4<sup>th</sup> power of the weight, so heavy trucks cause the vast majority of all pavement damage. This includes cracking that can result in potholes and rutting that can cause hydroplaning or difficulty in vehicle control. A recent study on the impact of overweight trucks to the road system gave an annual impact of \$77.5 million.

#### **Legislative and Judicial Issues (including CDL Licensing)**

- With a lack of manpower in the enforcement arena a more severe fine and penalty structure could be implemented for "critical" violations" such as speed (10-14 MPH or more above posted limits), improper lane change, and following too close. Speed limits are simply ignored by most drivers.

- No PJC should be allowed by the court. Drivers should be either guilty as charged, not guilty or reduced to a lesser charge if the court finds the facts relative. Driving with no license and no insurance is VERY SERIOUS.
- Fine amounts should be at least \$250.00 and pro rated on MPH along with court costs for these acts. They could/should be applied to all licensed drivers, regardless of age, state of issue, etc. For out of state drivers they could be required to post bail TODAY.
- An accumulation of the severe violations should lead to a revocation of license of at least 90 days in a short period of time. Again this applies to all drivers not just CDL holders. DWI, & DUI penalty should be severe also.
- Cell phone use while driving, doing paperwork, and other “quite creative” activities which are considered severe distractions should be penalized by law. These could/should fall under “Reckless Driving” statutes and again applicable to all not some.
- Deliberate and hastily made lane changes to the right in an attempt to pass should carry a reckless driving charge. CMV drivers are severely handicapped in guarding the right side blind spots
- A vehicle traveling 70 MPH is moving 102 feet per second and our trailers are now 53 feet long. Therefore if the vehicle is immediately behind the CMV and the driver moves right to pass only a very few seconds are available to accurately recognize the hazard. Complicate this by poor weather conditions or darkness and the CMV driver is simply guessing. They are hoping and praying their decision was correct, or saying countless times per day “that was close & where did they come from”. This is a sure cause of frustration to all parties and the leading cause of “Road Rage”.
  - Countless drivers fail to yield entering the interstate. The CMV drivers normally act with courtesy and move left to allow the vehicle to enter. This often creates the hazard described above. I get calls every month stating our driver would not allow them to enter the roadway. Therefore more designated lane restrictions are in order.
- Drug tests should be mandatory and administered to ALL drivers involved in fatal crash or one with multiple/serious injury. This is a relevant contributing factor and could balance the liability and tort issues in the courtroom. The results should be a part of the official accident report and allowed to be posted on a drivers license as a positive test result for all to see. A “DILUTED TEST” should also be considered a positive test for at least CDL holders. This is a serious matter.
- Determine from Crash Data, Class C operators that are considered a “Contributing Factor” to a collision involving a CMV be required to complete with satisfactory results, a written Examination upon license renewal. A minimum of 50% of the questions on the Examination should be directly related to sharing the road with CMV’s. Those questions should be half of a situational reasoning and the other half of General Knowledge criteria.
- Consider all convictions for moving violations to be a §383.51, Table 2 “Serious Traffic Violation” when committed in by a CDL holder while operating a CMV. This is basically a 2 convictions in 3 years criteria, which could lead to a loss of CDL privileges for 60 days. There are several states that have established a similar practice.
- Concentrate enforcement regarding Driver Qualifications and Carrier Compliance toward private units where Transportation is not the primary function of the CMV owner. These carriers should be encouraged to first solicit assistance regarding driver qualification and records retention without the threat of enforcement action. FMCSA, ATA, NCTA and responsible carrier professionals should be encouraged to assist these owners when requested. The Transportation Industry should make all resources possible available to any responsible owner/carrier who would make a concerted effort to improve their safety function.

- Get radar detectors out of Commercial Motor Vehicles and consider implementing momentum/force (consequence of error) based speed penalties. SPEED x WEIGHT Factors.
- DMV (CDL) and FMCSA need to compile comprehensive logs of driver crash involvement (both CDL & Private Vehicle), insurance claims, criminal charges, and driver citations (issued). These comprehensive indices should be periodically updated (at least quarterly) and abnormalities should be further investigated. The intent would be to establish a Driver Rating system that can be utilized for behavioral comparisons. Important that mileage logged be factored if possible to reflect relative exposure and experience.
- Some concern that tractors and trailers using FARM tags are being mis-used to circumvent the higher registration requirements, enjoy FARM vehicle exemptions, and largely allow these vehicles to transport fertilizer and other products under the radar - in addition to being unfair to smaller business operators this also introduces serious national security issues.
- The CDL unit of DMV is primarily concerned with the entry-level CDL driver. We keep statistics in regards to accidents and fatalities involving the entry level (first twelve months of holding a commercial driver license) and we look for the weak link we may have in the knowledge and skill's testing of these drivers. At our last meeting we discussed the fact that North Carolina has several truck driver training schools which have been certified by the joint effort of the Motor Carrier section of the NCSHP and the CDL unit of DMV. I was asked if we had any statistics that would show the driving behavior of graduates of truck driver training schools (TDTS). The answer then was no. I am now working on a data request which may give us some comparison of the entry level drivers who have graduated from a TDTS and those entry level drivers who did not attend a TDTS. I hope to be able to share this with you at our next meeting.
- The other area of concern is the growing population of Hispanic commercial drivers in North Carolina. According to Dr. Ron Hughes in North Carolina between 2000 and 2004 we have had an increase in Hispanic involvement in CMV-involved crashes. Several questions arise when discussing this and we are in the process again to receive statistical data which may guide us toward some improvements we can make in this area.
- During our last federal compliance audit it was determined by the FMCSA that North Carolina was masking the record of commercial drivers. What they found was a high number of prayer for judgments (PJC's) being used by the courts for holders of commercial driver licenses. Basically a driver who may have already been a problem driver would receive a PJC and this would prevent he or she from being suspended. Then in a short period of time this same driver would be involved in a crash and at the time of the crash he or she would have been suspended if charged previously instead of receiving the PJC. Our state automated driver license system will no longer allow a PJC to be placed on a CDL or used if any licensed driver is charged while driving a CMV. We anticipate this new regulation to have a major impact in keeping problem commercial drivers from legally driving CMV's.
- Create a Judicial Outreach Program that deals specifically with CMV enforcement and violations. Problem: The court system dismisses CMV citations even where serious CMV charges exist.
- State sponsored CMV seat belt law that would make it mandatory to wear a seat belt while in operation of a CMV. Problem: Approximately 70 % of CMV crashes result in the operator being ejected from the tractor.
- Legislation to include 10,000 to 26,000 GVWR intrastate commercial motor vehicles (CMV) in the state CMV regulations. This is an issue that should at the very least be discussed. As it stands right now these vehicles are not regulated in NC. These are still very large vehicles and contribute to our overall crash problem.

- Possibility of raising fines for CMV violations in NC. This is an issue that would need to be addressed by comparing NC CMV fines to other bordering states. High fines send a message to poor performers that NC will not tolerate continued CMV violations. This could be done by using an elevated scale that would increase fines for carriers with a history of violations.
- Judicial Outreach is an area that has been greatly neglected. Commercial Driver License laws have been greatly improved in this state over the past three years, but none of those improvements will work without a good judicial system. It is imperative that the citations issued to a driver not be reduced by judges and attorneys in the NC court system. When serious traffic violations are reduced in court it nullifies the CDL laws that have been passed to revoke drivers with a history of poor driving.
- Identification of problem CMV drivers. If problem CMV drivers can be identified a program can be put into place to train these drivers and improve driving skills. Knowing that drivers are the primary reason for many truck crashes, it only makes sense to focus our efforts on them.
- Regulate the intrastate carriers in NC. As it stands right now very little is being done to regulate the intrastate trucking industry. Requiring intrastate motor carriers to register with the state to obtain an intrastate DOT number would be the first step. The next step would be to develop a state system to identify carriers needing an intrastate compliance review. Finally, the adoption of the federal fine structure to raise penalties for violations discovered would encourage violators correct safety issues.
- Large trucks on multilane lanes  
(Ex. Several large trucks occupying two adjacent lanes driving 65 in 70 zone causing other vehicles to be backed up behind them and promoting aggressive driving to get around trucks.)
- Drivers pushing their physical limits due to fatigue
- Mud-flap Law for trailing axle of all units.
- Driver experience
- Minimum age driver
- Excessive Speeding Trucks: From my personal experience, excessive speeding and tailgating of trucks is the number one problem. I put over 25,000 on just one of my vehicles last year with most of the mileage being on Interstate and US numbered routes. Large speeding trucks intimidate other road users. Also, there is a general feeling that trucks set the prevailing speeds. The "Consequence of Error" coupled with momentum issues (mass, stopping distance, closing distance, perception/reaction of entering traffic) of an 80,000 pound missile traveling at 75 mph or more is devastating to other vehicles. And by far, the death and severe injuries accrue to the other vehicle occupants.
- Adjudication: Talks with involved personnel indicate that adjudication is the weakest link in the safe truck operations for speeding, out-of-service, overweight trucks and off STAA routes. This ranges from a violation fee structure that bears little resemblance to the safety severity of the offense, i.e., brake cylinder problems \$30.00, change of address paperwork \$150.00, running a red light \$10.00, two tie downs instead of three, \$100.00 to "plead downs and dismissals" for overweight, off STAA route, and speeding tickets.\



- A separate Executive Committee should be set up to address the CHRONIC adjudication problem. The “plead down mechanism” serves only to dilute already insufficient enforcement resources. Do I need to start making contacts on this?

Also, I am told that with proper approval that we can help finance this Safety initiative with income from Fuel Tax Compliance Enforcement - estimated to be \$40 million per year. Studies have shown that some one third of the trucks operating in North Carolina are not in compliance. Computerized programs are available to cross check this with relative ease. On the other hand, tankers carrying non-taxed fuel in North Carolina would require trucks to be stopped and physically checked. For example, the magnitude of this problem is demonstrated by the fact that some \$3,000 of clear profit per load of 8,000 gallons of Georgia fuel (taxed at 7 ½ cents) is a big incentive for tax evasion and adds to the “Easy Truck State” image of North Carolina.

### **Miscellaneous**

- Stop Systematically Blaming it on the "Other" Vehicle - acknowledge the complexity of the growth, interactions and dynamics, and work toward saving lives through sustained aggressive and collaborative effective 4 E approaches - Enforcement, Engineering, Education, and Emergency Response. Stop fragmenting and diluting efforts by worrying about what color or commodity the vehicle is or is serving. Extend enforcement and data driven analysis and countermeasures beyond the Interstate efforts and focus toward US, NC, and in some cases even SR route systems.